# KENTUCKY ASSET/LIABILITY COMMISSION

# SEMI-ANNUAL REPORT

For the Period Ending December 31, 2003

### INTRODUCTION

This is the Kentucky Asset/Liability Commission's ("ALCo") fourteenth semi-annual report pursuant to KRS 56.863 (11) for the period beginning July 1, 2003 through December 31, 2003. This report may be viewed in color at http://ofm.state.ky.us/alcosemi-reports.html.

### **KEY THEMES**

There were several factors which had an impact on activity during the reporting period. The key themes were:

### On the national level

- War in the Middle East.
- U. S. economy begins to show signs of renewed economic activity.
- State governments continue to struggle under fiscal pressure.
- The Dow Jones Industrial Average finished the year up 1,846 points at 10,454.

### On the state level

- Systematic financing of 2003 budget authorizations.
- Ratings for appropriation supported debt are upheld.
- No TRAN issue for FY04.

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### **INVESTMENT MANAGEMENT**

**Market Overview.** Since the fourth quarter of 2001, Real Gross Domestic Product ("GDP") has been growing, reaching a peak of 8.2 percent in the third quarter of 2003. Over this same time period, however, employment has not grown, leading to discussions about a "jobless recovery". It appears that in the last half of calendar year 2003, the corner has finally turned on employment growth as the unemployment rate dropped from 6.3 percent in June to 5.7 percent in December. In contrast, the Labor Department reported the creation of only 184,000 new non-farm jobs over the same time period.

This discrepancy of declining unemployment rates with minimal job creation has several possible explanations. The unemployment rate originates from the Household Survey where people report their employment status versus the number of non-farm jobs generated from the Establishment Survey in which the Labor Department contacts businesses to report their change in payrolls. The Household Survey includes self-employed and newly formed businesses while the Establishment Survey does not. This bodes well for the employment picture as the Establishment Survey should eventually "catch-up" with the Household Survey.

Concerning the Household Survey, Federal Reserve Board Chairman Greenspan has indicated that there may be some issues with the size of the work force estimates and that immigration may be under-estimated, implying that the work force and the unemployment rate may be higher than reported. Another factor weighing on employment is the growth in productivity. Productivity grew at 8.7 percent in the third quarter and 2.0 percent in the fourth quarter. While long-term productivity growth is a plus for the economy (as this leads directly to increased standards of living), in the short-term, growth at this level allows business to increase production without hiring new people. Overall, employment appears to be picking up steam but is still well below the economy's potential.

The Federal Open Market Committee (FOMC) of the Federal Reserve has caused some consternation in the markets on several occasions recently. In May of 2003, the FOMC expressed concern about "an unwelcome substantial fall in inflation" or deflation and openly considered using "nontraditional means" to apply monetary policy. This lead to a massive rally (higher bond prices and lower yields) and an apparent bottom in the current interest rate cycle during June. Since then, the FOMC has lessened, but not eliminated, their concern with deflation but stated that the Fed Funds rate would remain at the historically low level of 1.0 percent for a "considerable period". At the January 2004 meeting, "patience" was substituted for the "considerable period" language, causing some to believe that we are nearing the end of the interest rate cycle.

The expectation is that the FOMC should keep Fed Funds low (not necessarily 1.0 percent) until the "output gap" is closed. This gap is the difference between the economy's potential, non-inflationary growth rate and the actual experienced growth rate. The only problem is that the output gap is nearly impossible to measure and subject to considerable debate. With inflation subdued, the GDP Price Deflator rose only 1.2 percent on a year-over-year basis in the fourth quarter. At these levels the FOMC can remain accommodative for some time. Several consecutive months of 300,000 plus growth in non-farm payrolls would be a good indication that the gap is closing.

All of this language by the FOMC has been accompanied by massive foreign currency intervention from Japan. Basically, the Bank of Japan ("BOJ") is selling Yen to buy dollars and then buying Treasury securities with the dollars. Japan's objective is to keep the Yen weak versus the dollar to aid exports to the U.S. and other Asian countries (primarily China) which keep their currencies pegged to the dollar.

The net effect of the FOMC and BOJ actions is increased domestic interest rate volatility within a modest range. The 10-year Treasury came off its lows in June to reach a peak of 4.60 percent in September. Since then, it has traded between 4.60 percent and 3.93 percent, closing out the period at 4.25 percent. Most other interest rates have followed a similar pattern of reaching a peak in September and maintaining a range since that time.

Looking forward, real GDP growth appears to be strengthening, and employment has turned the corner and while still anemic, is growing. Expectations are that the FOMC will keep short-term interest rates low for calendar 2004 near the current Fed Funds target of 1.0 percent. The biggest question facing financial markets is when will the "output gap" close and the Fed start raising interest rates?

**Tax-exempt Interest Rates and Relationships.** The Bond Buyer 20-year General Obligation Index averaged 4.75 percent for the calendar year 2003. The high was 5.18 percent in August, the low was 4.21 percent in June 2003, and the year ended with 4.58 percent.

The Bond Market Association ("BMA") Municipal Swap Index averaged 1.03 percent for the year. The high was 1.36 percent in April and the low was 0.70 percent in July 2003. BMA ended the year with 1.14 percent. The 30-day USD London Interbank Offered Rate ("LIBOR") averaged 1.21 percent for the year. The high was 1.38 percent in January 2003 and the low was 1.02 percent in June 2003. BMA traded as high as 108 percent of 30-day LIBOR in December 2003 and as low as 63 percent in July 2003.

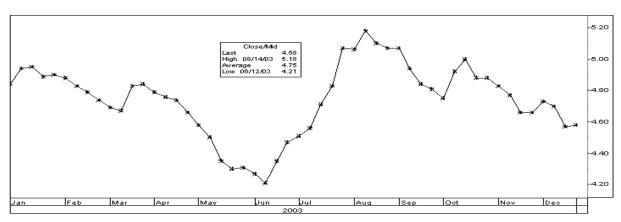
Tax-exempt ratios remained at relatively high levels throughout 2003 versus taxable counterparts across the yield curve due to the low absolute level of interest rates. Municipals averaged 85 percent of money-market yields and approximately 89 percent in the 20-year maturity spectrum versus the LIBOR swap curve and almost 100 percent versus U.S. Treasuries. This yield compression results in negative carry in most refunding bond escrows and has a significant impact on municipal issuer's ability to refund bonds despite the low interest rates. Fortunately, the IRS and the Bureau of Public Debt recently amended the regulations such that issuers of tax-exempt debt can cancel existing state and local government series securities and replace them with higher yield securities up to the allowable yield on the bonds, with a ten basis point charge. Should interest rates rise sufficiently, issuers like the State Property and Buildings Commission ("SPBC") may be able to recoup all or a portion of the negative carry in certain refunding bond escrows. Currently, SPBC does not have sufficient negative arbitrage except in the SPBC 82 transaction, which was sold in January 2004. Staff will monitor this situation closely in order to recapture as much of the negative carry as possible. While this is a nice feature, it does require re-verification and legal opinions, which creates additional time and expenses that must be factored into the decision process.

Range

12/31/02 - 12/25/03

Period

BBWK20GO Index
Weekly



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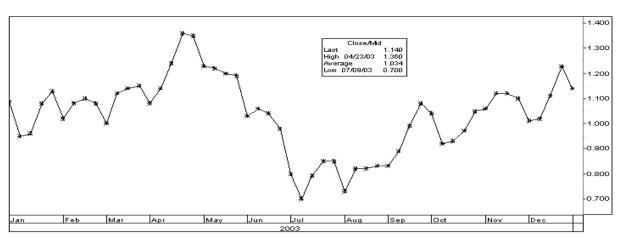
Bond Market Association "BMA" Municipal Swap Index

Range

12/31/02 - 12/31/03

Period

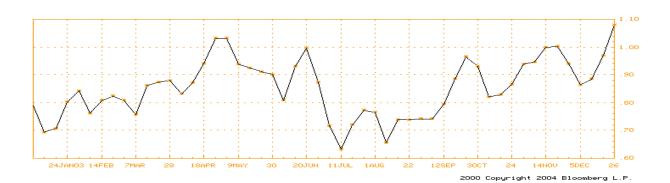
MUNIPSA Index Weekly



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Bond Market Association "BMA" Municipal Swap Index as a percent of one month LIBOR

RANGE 1/ 1/03 TO 12/24/03



**Portfolio Management.** For the first half of fiscal year 2004, the Commonwealth's investment portfolio averaged \$2.4 billion. As of December 31, 2003, the portfolio was invested in U.S. Treasury Securities (14 percent), U.S. Agency Securities (36 percent), Mortgage Pass-Through Securities (2 percent), Collateralized Mortgage Obligations (3 percent), Repurchase Agreements (22 percent), Municipal Securities (6 percent), Corporate Securities (7 percent), Asset-Backed Securities (3 percent) and Money Market Securities (7 percent). The portfolio had a market yield of 1.96 percent and an effective duration of 1.54 years.

The total portfolio is broken down into three investment pools. The pools' balances as of December 31, 2003, were Short Term Pool - \$510 million, Intermediate Term Pool - \$1,465 million and Bond Proceeds Pool - \$683 million.

Total investment income from all investments, on a cash basis, for the first half of the fiscal year 2004 was \$73.5 million versus \$51.5 million for the first half of fiscal 2003. On a full mark-to-market basis, investment income was \$18.98 million fiscal year to date versus \$95.27 million for the same period in fiscal year 2003.

The investment income for the pools for the first half of fiscal year 2004 is substantially below the income for the same period in fiscal 2003. There are three primary reasons for this decrease. First, the average balance of the investment portfolio is roughly \$300 million less during 2004 than 2003. There simply were fewer assets to earn income. Second, during this period in 2003, the market experienced a significant rally with three year Treasury yields declining by almost 150 basis points compared to almost a 70 basis point increase in 2004. Because prices move in the opposite direction of yields, this means that prices rose dramatically during 2003 which increases return on a market value basis. Market valuations for fiscal year 2004 have decreased thus lowering returns versus the same period the prior fiscal year. Finally, there has been a shift in the allocation of funds. The Long Term Pool has been eliminated, and significant assets have been moved from the Intermediate Term Pool to the Short Term Pool. Because the yield on the shorter pools has been lower than on the longer pools this shift has resulted in lower, but more stable earnings.

### **DEBT MANAGEMENT**

The Office of Financial Management developed a comprehensive debt plan for newly authorized debt that:

- Provided cash to fund eligible projects in a timely manner consistent with constraints established in House Bill 269.
- Achieved the lowest borrowing cost over the life of the obligation, consistent with risk tolerance.
- Minimized budgetary complications.
- Evaluated and combined refunding candidates with new money issues for economic savings.
- Maintained existing ratings.

SPBC issued Project Numbers 77-81 during the reporting period for a total par amount of bonds of \$508,945,000. Below is a short summary of each transaction.

**SPBC 77.** \$77,208,000 new money General Fund supported capital projects for a variety of agencies, including Rupp Arena, and a \$39,355,000 refunding that produced \$1,678,444 present value savings or 4.265 % of refunded par.

**SPBC 78 & 79.** \$150 million taxable bonds for Economic Development Bond Pools, Bonds for Brains and \$150,193,480 tax-exempt bonds, including Coal Severance and Tobacco supported bonds for water programs. Wrapping the debt service, i.e. amortizing the taxable bonds first to take advantage of a steep yield curve structure saved over \$16.1 million over the life of the transaction and \$7.6 million on a present value basis and performed as well as derivative based alternatives.

**SPBC 80.** Refunded \$32,695,000 of SPBC Project 66 (Agency Fund) generating \$1,215,676 present value savings or 3.718% of refunded par.

**SPBC 81.** State Fair Board - \$55,300,000 standard 20-year level debt, AMBAC insured, fixed rate transaction. A debt service reserve fund was required due to the Agency Fund debt service coverage levels, recent fee increases which had not been fully implemented and the time necessary to request an appropriation from the General Assembly in the unlikely event that the Fair Board could not meet its obligation.

### State Property and Buildings Commission Recent Bond Issue Summary

Fund Source:	General Fund SPBC 77	General Fund SPBC 78(Taxable)	General Fund SPBC 79	Agency Fund SPBC 80	Agency Fund SPBC 81
Par Amount:	\$117,145,000	\$151,225,000	\$145,290,000	\$39,985,000	\$55,300,000
Sale Date:	August 5, 2003		September 24, 2003	October 8, 2003	November 7, 2003
Settlement Date:	August 20, 2003	October 9, 2003	October 9, 2003	,	November 19, 2003
Final Maturity:	August 1, 2023	October 1, 2016	October 1, 2023	May 1, 2024	November 1, 2023
NIC:	4.468%	4.569%	4.746%	4.336%	4.425%
TIC:	4.386%	4.589%	4.678%	4.213%	4.386%
All-In TIC:	4.404%	4.603%	4.686%	4.233%	4.403%
Bond Buyer Index (BBI):	5.060%	4.720%	4.810%	4.920%	4.830%
Coupon on Last Maturity:	5.000%	5.140%	4.750%	4.750%	5.000%
Total Debt Service:	\$164,127,295	\$198,773,409	\$264,111,005	\$62,697,982	\$85,748,322
Max. Annual Debt Service:	\$20,948,921	\$16,283,574	\$23,664,388	\$5,114,547	\$4,237,842
Bond Insurance:	MBIA	MBIA	MBIA	MBIA	AMBAC
Underwriter:	Morgan Stanley	Citigroup	UBS Financial Services	Morgan Stanley	Morgan Stanley
Par Amount of Refunded Bonds:	\$39,355,000			\$32,695,000	
Avg. Coupon of Refunded Bonds:	5.323%			5.595%	
PV Savings as % of Refunded Par:	4.264%			3.718%	
Net PV Savings:	\$1,678,443			\$1,215,676	

Ratings Update. The rating community has not taken any action since October 2002 when Standard & Poor's ("S & P") downgraded the state appropriation debt from "AA-" to "A+" with a stable outlook. Moody's rates the state's appropriation supported debt "Aa3" with a negative outlook. Fitch assigns a "AA-" with no expression concerning the outlook. Fiscal year 2004 General Fund supported SPBC 77, 78, and 79 all received the underlying ratings identified above. FY 2004 Agency Fund supported issues by the Commission were both insured. SPBC 80 received an underlying rating the same as the General Fund Supported obligations, while SPBC 81 received underlying ratings of "A+" by S & P, "A1" from Moody's and "A" by Fitch. The lower ratings for the SPBC 81 issue reflect limited revenue coverage and a new fee schedule that has not been fully implemented.

As outlined in the previous report, rating agency concerns continue to focus on a structurally balanced budget, lack of liquidity and further commitment to replenishing the Budget Reserve Trust Fund in the 2004-06 biennial budget.

### **Tax and Revenue Anticipation Notes**

**2003 TRAN**. The Commission did not issue a TRAN for FY 2004 due to poor economic viability of such a transaction. Originally, TRANs were issued at tremendous rate advantages to taxable reinvestment rates, often producing 2 percent excess returns when the General Fund had excess cash and significantly lowering the borrowing cost when the balances were negative. The economic downturn caused General Fund revenue growth to drop sharply against ever increasing demands on the expenditure side. The prospects for a significant improvement in the General Fund cash position for FY 2004 over FY 2003 were not encouraging. The fixed income market environment was not conducive to a cost-effective transaction as tax-exempt notes were and continue to trade at very high ratios versus 1-month LIBOR. This is important because the General Fund can borrow from internal resources, the state's investment pools, at rates very close to the 1-month LIBOR.

A possible FY 2005 TRAN issue this summer will require continued monitoring of the relationship between tax-exempt and taxable securities and the overall liquidity of the state and the corresponding investment pools. Should those investment pool balances continue to deteriorate, limiting the General Fund's ability to borrow internally, then a TRAN would need to be seriously considered to fund cash flow requirements. In addition to budgeted General Fund receipts and expenditures, the rating agencies will evaluate the availability of funds in the investment pools as a potential source of cash to pay off the notes at the maturity date, in the event General Fund receipts are insufficient to pay the obligation when due. It should be noted, however, that if the investment pool balances deteriorate to a level that does not provide a comfortable coverage ratio versus the amount borrowed, then it is highly likely that the issue would not achieve the highest short-term ratings. The highest short-term ratings are required in order for an investment to be money fund eligible, the predominate purchasers of these types of securities. Alternative options would include purchasing credit enhancement or selling a security that had a second tier rating, the cost of which is estimated to be 30-60 basis points higher than a money fund eligible rating.

**Project Notes.** The only activity for the Commission during the reporting period was the settlement of the ALCo Project Refunding Notes 2003, General Fund Series A in the amount of \$171,260,000. The Notes were sold on June 10, 2003 and delivered on July 17, 2003. The Notes refunded all of the remaining SPBC 55 Bonds, except the non-callable 2007 and 2008 maturities and all of the remaining ALCo Project Notes, 1999 General Fund First Series.

ALCo entered into an interest rate hedge with UBS Financial Services Inc. on December 12, 2002 to lock in the savings on approximately two-thirds of the transaction (See Financial Agreements). Present value savings for the SPBC 55 bonds were \$5.1 million and the present value savings for the ALCo Note refunding were \$0.8 million. Combined, the present value savings to the General Fund were \$5.9 million or 3.42 percent of refunded par.

Additionally, the 2001 General Fund Project Notes, a fixed rate series originally issued as seven-year notes to fund equipment acquisition for higher education and other state agencies, remain outstanding.

### Table of Outstanding ALCo Notes as of December 31, 2003

2001 General Fund First Series	\$ 27,865,000	Final maturity February 1, 2008
 2003 General Fund Series	\$171,260,000	Final maturity July 15, 2013
Total	\$199,125,000	

### **FINANCIAL AGREEMENTS**

As of June 30, 2003, ALCo had four financial agreements outstanding, but a net notional amount exposure of zero. These transactions are detailed in the table on page 10. During the period, the SPBC 55 transaction was terminated simultaneously with the sale of the ALCo Project Refunding Notes, 2003 General Fund Series.

Of the continuing outstanding financial agreement transactions, the first item is a total return swap related to the \$56,485,000 July 1, 2009 maturity of the TAK Resource Recovery 1985 Series A Bonds, which bears interest at 6 percent. Staff worked for approximately 18 months to develop this transaction with Morgan Stanley ("MS") and finally executed the trade in April 2001. The 1985A Bonds could not be economically refunded, despite a very low interest rate environment, due to the enormous transferred proceeds penalty associated with the Debt Service Reserve Fund ("DSRF") which is earning approximately 10 percent. MS, bond counsel and the Commonwealth developed a structure whereby the bonds would be called, but not redeemed. Once called, the bonds were sold to MS. ALCo then entered into a total rate of return swap, whereby MS pays ALCo 6 percent (the coupon on the bonds) and ALCo pays to MS, BMA (short-term tax-exempt municipal index) plus a spread (currently 58 basis points) to cover expenses. This transaction provided the synthetic variable rate exposure to offset the asset sensitivity in the balance sheet, i.e. sensitivity to declining interest rates. During the first few weeks of the trade, ALCo booked \$147,727 in earnings on the first payment date of July 1, 2001. Rates continued to steadily decline, putting the trade in a very favorable position. Shortly after the events of September 11,

2001, interest rates tumbled dramatically and on September 27, 2001, staff entered into an offsetting trade, locking in a guaranteed spread of 213 basis points. The reversal rate (rate ALCo agrees to pay MS) was 3.87 percent versus the original fixed receiver rate of 6 percent from MS. ALCo has received over \$2.5 million under the terms of the agreements since inception. The expected total benefit from this transaction to maturity is \$7.46 million.

Since the two transactions offset each other for a net notional amount of zero. ALCo collects the difference between the two payments and deposits the proceeds into a swap account held for the benefit of the Road Fund. This account also secures future payments to MS under the agreement, if necessary. ALCo is obligated under the agreement to accumulate a minimum balance of \$3 million in the swap account. Once cumulative deposits have achieved that level, funds may be available to offset future debt service payments. Since the bonds are still outstanding and the TAK retains the right to call the bonds at face value (par), the termination value of the swap is essentially the present value of the fixed expenses (13 basis points). In the event that short-term tax-exempt rates rise above the coupon on the bonds, the transaction would be terminated and the bonds would be resold to the marketplace. If the value of the bonds in the market are below par, then ALCo would make a payment from the swap account to MS equal to the difference between the then market value and par. Alternatively, the Road Fund could purchase the bonds as an investment at par. The Road Fund and the TAK get the best of both worlds with this transaction in that they retain the highly valuable DSRF earning 10 percent and lower the cost of borrowing as long as interest rates stay low. In the event that interest rates rise dramatically, then the investment portfolio of the Road Fund will earn significantly more than projected so long as the Road Fund maintains an investable balance equal to or greater than the notional amount of the transaction. For tax purposes the Total Return Swap must terminate prior to the final maturity of the bonds. Market conditions permitting, a similar type trade would be reestablished for a short period or terminated.

ALCo also entered into an identical transaction with MS for the 5.50 percent bonds due July 1, 2007 of the TAK Toll Road 1986 Series A Bonds with a par amount of \$50,920,000. The Toll Road DSRF earns a bit less than the Resource Recovery 1985A bonds and the coupon on the outstanding bonds is also less, but the mechanics are the same.

On July 24, 2001 MS agreed to enter into a total return swap whereby MS would pay ALCo beginning on January 3, 2002, 5.50 percent in exchange for BMA plus 45 basis points (to cover expenses) The trade could not be executed until December 7, 2001, after the call notice for the bonds had been issued. ALCo agreed to pay MS 4.15 percent in exchange for BMA plus 45 basis points, locking in a guaranteed spread of 135 basis points as long as BMA plus 45 basis points remains below the coupon of the bonds of 5.50 percent.

During fiscal year 2003, the Federal Highway Administration awarded the state Transportation Cabinet approximately \$13 million, the estimated remaining principal amount of the Toll Road Bonds related to the Toll Roads known as the Hal Rogers Daniel Boone Parkway and the Louie B. Nunn Cumberland Parkway. The award was granted with the understanding that the tolls would no longer be collected and the toll booths removed on these two roads. On July 1, 2003, the Total Return and Fixed Swap transactions were adjusted due to the \$12,195,000 partial redemption of the 2007 term maturity of the Toll Road 1986 Series A Bonds. The \$50,920,000 original notional amount was reduced to \$38,725,000, with no obligation due from either party with respect to the unwound notional amount as the partial termination occurred on an interest payment date. A swap termination payment on the fixed portion in the amount of \$705,000 was paid to MS. The revised present value savings level, factoring in all

### **SWAP SUMMARY**

	TAK RR 85 A	TAK RR 85 A	TAK TR 86 A	TAK TR 86 A	Terminated SPBC 55
	Total Return	Fixed	Total Return <sup>1</sup>	Fixed <sup>1</sup>	current refunding <sup>2</sup>
Fund Source	Road Fund	Road Fund	Road Fund	Road Fund	General Fund
Hedge	Net Interest Margin	Total Return	Net Interest Margin	Total Return	Refunding
Counter-Party	Morgan Stanley	Morgan Stanley	Morgan Stanley	Morgan Stanley	UBS Financial
Counter-Party Ratings*	Aa3/AA-/AA	Aa3/AA-/AA	Aa3/AA-/AA	Aa3/AA-/AA	Aa2/AA+/AAA
Termination Trigger	BBB-/Baa3	BBB-/Baa3	BBB-/Baa3	BBB-/Baa3	BBB-/Baa3
Swap Type	Variable Pay	Fixed Pay	Variable Pay	Fixed Pay	Fixed Pay
Benchmark	ВМА	ВМА	ВМА	вма	LIBOR
Reset	W eekly	Weekly	Weekly	Weekly	Semiannual
Notional Amount	56,485,000	56,485,000	38,725,000	38,725,000	113,185,000
Amortize (yes/no)	no	no	yes	yes	yes
Execution Date	4/23/2001	9/20/2001	7/24/2001	7/24/2001	12/12/2002
Start Date	5/24/2001	9/27/2001	1/3/2002	1/3/2002	8/1/2003
End Date	7/1/2007	7/1/2009	7/1/2005	7/1/2007	8/1/2013
Fixed Rate pay-(rec)	(6.000%)	3.870%	(5.50%)	4.150%	3.215%
Day Count	30/360	30/360	30/360	30/360	30/360
Payment Dates	Jan. 1 & July 1	Jan. 1 & July 1	Jan. 1 & July 1	Jan. 1 & July 1	Feb. 1 & Aug. 1
Security Provisions	Road Fund Inv.	Road Fund Inv.	Road Fund Inv.	Road Fund Inv.	GF Debt Service
Current Market Valuation December 31, 2003	0.00	0.00	0.00	0.00	0.00
Interest Earnings Cumulative Prior Periods Current Period - 12/31/2003	147,727 0.00	1,943,733 428,316	0.00 0.00	689,547 170,383	-5,889,111.00 0.00
Total	147,727	2,372,049	0.00	859,930	0.00

<sup>\*</sup> Moody's, S&P, Fitch

### As of December 31, 2003:

### Total Notional Amount Executed

	General Fund <sup>2</sup>	Road Fund		UBS Financial <sup>2</sup>	Morgan Stanley	
Fund Source Total	0	190,420,000	Counter Party	0	190,420,000	
Net Exposure Notional Amount						
	General Fund <sup>2</sup>	Road Fund		UBS Financial <sup>2</sup>	Morgan Stanley	
Fund Source	0	0	Counter Party	0	0	
10 Percent Net Exposure	General Fund	Road Fund		General Fund	Road Fund	
Debt Outstanding	2,258,025,120	824,503,103	10 Percent	225,802,512	82,450,310	
10 Percent Investment Portfolio						
_	Other Funds	Net Road Fund	<u> </u>	Other Funds	Net Road Fund	
Investment Pool Balance	2,581,983,183	76,469,038	10 Percent	258,198,318	7,646,904	

Partial Unwind of \$12,195,000 on July 1, 2003 of \$50,920,000 original notional amount.

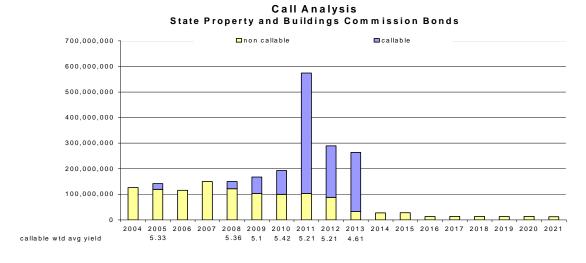
 $<sup>^{2}\,</sup>$  Terminated on July 17, 2003 with \$5,889,111 payment as priced on June 11, 2003.

expenses, is approximately \$1.6 million. The net notional amount exposure remains at zero and the market value is par as in the previously described transaction. ALCo has received \$859,930 to date.

Also, ALCo entered into a cash settled hedge with UBS Financial Services Inc. ("UBS") on December 12, 2002 to preserve savings for a refunding of SPBC 55. The trade was to be effective August 1, 2003, for a notional amount of \$113,185,000, amortized through August 1, 2013. UBS agreed to pay a floating rate of 78.75 percent of LIBOR in exchange for a fixed payment from ALCo of 3.215 percent. The present value savings for this portion of the transaction were originally projected to be \$4,773,114. The swap transaction was terminated on June 11, 2003, the same day that the Notes were priced. The actual present value savings attributable to the hedged portion of the transaction were \$4,698,817. This is very close to the original projection and staff is satisfied that the hedge performed as designed. The slight under performance was attributable to a continuation of the abnormally high ratio of BMA as a percentage of LIBOR.

### **ASSET/LIABILITY MODEL**

**General Fund.** The SPBC debt portfolio as of December 31, 2003, had \$2,272 million of bonds outstanding with a weighted average coupon of 5.17 percent, modified duration of 5.07 years, and a yield at market of 2.64 percent. The market yield decreased by 61 basis points from the prior reporting period while modified duration decreased by .09 years reflecting maturing debt. The callable portion was \$1,113 million and had an average coupon of 5.18 percent. There are no outstanding currently callable 2004 bonds which can be refunded; however, SPBC 82 bonds refunded a variety of callable bonds from SPBC 57, 59, 60, 63, 64, 67, 68, 69A, 72 and 74 and defeased certain non-callable bonds maturing in 2005 and 2006. Details to follow in the next semi-annual report.

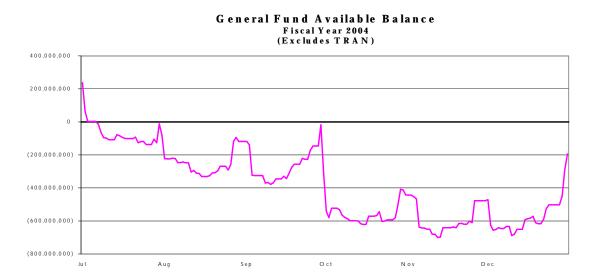


The SPBC General Fund debt structure has 28 percent of principal maturing in 5 years and 54 percent of principal maturing within 10 years. This is within the rating agencies proposed targets of 27-30 percent due in 5 years and 55-60 percent maturing within 10 years.

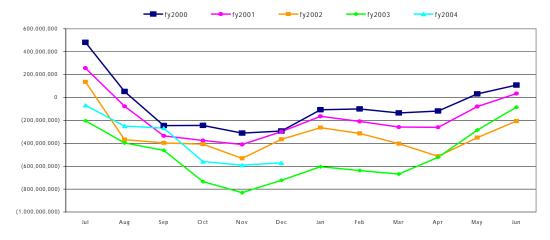
The General Fund had a high balance of \$238 million on July 1, 2003, and a low of negative \$701 million on November 12, 2003. The average and median balances were a negative \$384 million and a negative \$370 million, respectively. Since the General Fund continued to have a negative cash balance for most of the period, there is little, if anything, that can be done from an asset management viewpoint beyond current actions. No General Fund investment income has been distributed this fiscal year, and none is expected as cash balances remain negative.

From a liability management perspective, total General Fund debt service, net of reserve fund credits, was \$193.6 million Fiscal Year to-Date ("FYTD") 2004.

Net Interest Margin will continue to be negative due to significant fixed rate debt issuance, compressed yield ratios, overall level of investable asset and interest rates as well as the callability of the debt portfolio.





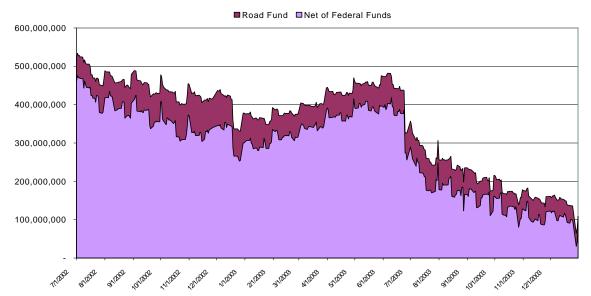


**Road Fund.** The Road Fund average daily cash balance for FYTD 2004 was \$203 million compared to \$442 million for the same period the year before. The Road Fund cash was invested in the Intermediate Term Investment Pool which had a duration of 1.89 years as of December 31, 2003. The Road Fund earned \$6 million on a cash basis for FYTD 2004 versus the revised fiscal year budget amount of \$10.8 million. Declining cash balances limit the opportunity to implement asset liability management strategies.

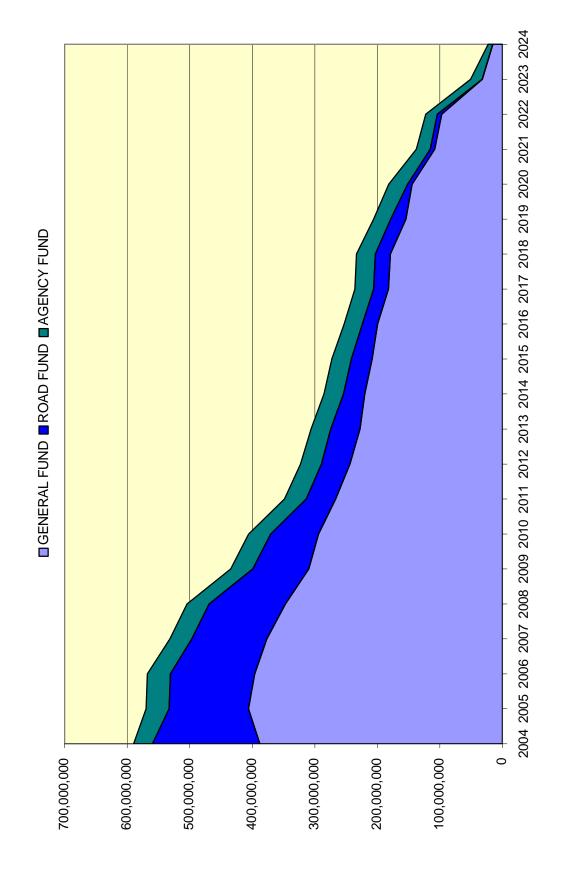
As of December 31, 2003, TAK had \$740 million of bonds outstanding with a weighted average coupon of 5.26 percent, modified duration of 3.75 years, and yield at market of 2.06 percent. Selected maturities of the Resource Recovery 1985A and Toll Road 1986A bonds with the most economical value were previously synthetically refunded with financial agreements as identified previously. TAK intends to issue a Request for Proposals to solicit refunding proposals for the Economic Development Road Revenue Bonds (Revitalization Projects). The 1993 Series are currently callable, the 1995 Series will be callable July 1, 2005, and there may also be advance refunding opportunities for these or other series of bonds.

Road Fund debt service paid, net of reserve fund credits, during FYTD 2004, was \$62.5 million resulting in a net interest margin (investment income earned less debt service paid) of negative \$56.5 million. The negative amount stems from a general decrease in interest rates on the investment side and limited callability of fixed rate obligations on the liability side. As the Road Fund has experienced in recent years, this trend can reverse itself very quickly if interest rates rise dramatically. The depletion of cash balances will make returning to positive territory a difficult hurdle.

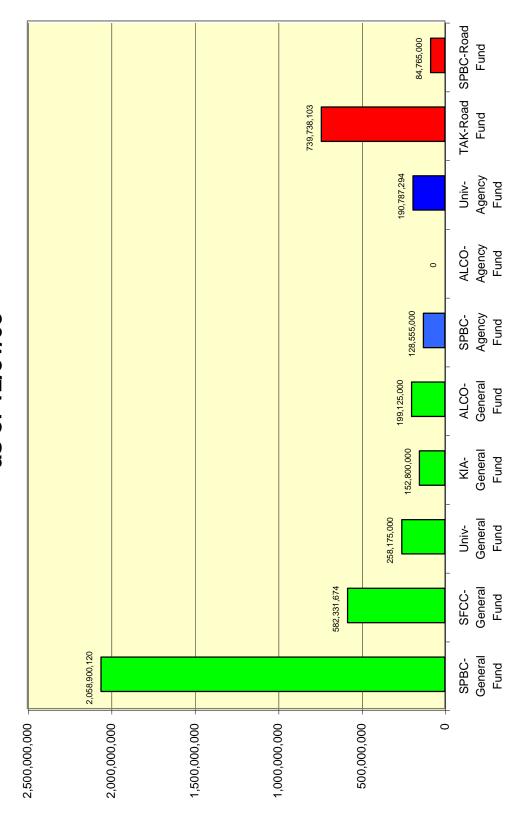
## Road Fund Available Balance Fiscal Year 2003-04 as of 12/31/03



# Appropriation Supported Debt Service by Fund Source as of 12/31/03



# Appropriation Debt Principal Outstanding by Fund Source as of 12/31/03



### **SUMMARY**

ALCo's approach to managing the Commonwealth's interest-sensitive assets and interest-sensitive liabilities continues to produce excellent results.

**Investments**. At fiscal year end 2003, incremental returns derived from new investment asset classes reached \$26.9 million since inception. The program continues but is no longer monitored for incremental value.

**Cash Management**. Cash management improved dramatically with the implementation of the General Fund TRAN program producing \$3.2 million in fiscal year 1998, \$4.7 million in fiscal year 1999 and \$7.3 million in fiscal year 2000. Economic benefit for fiscal year 2001 was \$6.5 million, fiscal year 2002 was \$4.3 million and fiscal year 2003 was \$0.3 million for a cumulative benefit of \$26.3 million.

**Debt Management**. Debt service savings have contributed an estimated \$252 million in value added since inception.

- ⇒ Synthetic advanced refunding of SPBC 40 (Second Series) using a delayed start interest rate swap produced \$1.1 million in present value savings.
- ⇒ Synthetic refunding of TAK Resource and Recovery 1985 Series A bonds has accumulated \$2.5 million to date of which \$428,316 is attributable to the current period.
- ⇒ Synthetic refunding of TAK Toll Road 1986 Series A bonds has provided \$859,930 to date of which \$170,383 was earned during the current period.
- ⇒ Application of Medium Term Notes structure and financial agreement strategies resulted in present value savings of \$6.6 million for SPBC refundings.
- ⇒ Wrapping debt service for taxable SPBC 78 with tax-exempt SPBC 79 saved \$7.6 million on a present value basis.
- ⇒ Lapsed General Fund debt service for fiscal year 1999 was \$10.5 million, fiscal year 2000 was \$29 million, fiscal year 2001 was \$76.5 million, fiscal year 2002 was \$104 million, and fiscal year 2003 was \$13.4 million. The total of \$233.6 million reflects the savings from the actual versus budgeted debt service.

Total value added since inception is approximately \$305 million.